I. AMENDMENT

In the Claims:

The following listing of claims will replace all prior versions and listings of the claims in the application:

Listing of the Claims:

1. (Original) A method for preparing a peptide antigen with modulated immunogenicity comprising substituting a least a first amino acid located in a CTL epitope with a first substitute amino acid having an extended or shortened side chain as compared to the first amino acid.

2. (Original) The method of claim 1, wherein the first substitute amino acid has the same base residue as the first amino acid.

3. (Original) The method of claim 1, wherein the first substitute amino acid is a non-natural amino acid.

4. (Original) The method of claim 1, wherein the side chain is an aliphatic side chain.

5. (Original) The method of claim 1, wherein the first substitute amino acid extends the side chain.

6. (Original) The method of claim 5, wherein the first substitute amino acid adds a – CH_2/CH_3 group to the side chain.

7. (Original) The method of claim 5, wherein the first substitute amino acid adds two – CH_2/CH_3 groups to the side chain.

8. (Original) The method of claim 1, wherein the first substitute amino acid shortens the side chain.

9. (Original) The method of claim 8, wherein the first substitute amino acid reduces one – CH_2/CH_3 group on the side chain.

10. (Original) The method of claim 8, wherein the first substitute amino acid reduces two –CH_2/CH_3 groups on the side chain.

11. (Original) The method of claim 4, wherein the first substitute amino acid eliminates an –OH group from the side chain.

12. (Original) The method of claim 4, wherein the first substitute amino acid eliminates an –NH_2 group from the side chain.

13. (Original) The method of claim 4, wherein the first substitute amino acid adds an –NH_2 group to the side chain.

14. (Original) The method of claim 1, further comprising determining the CTL epitope of the antigen.

15. (Original) The method of claim 1, further comprising modeling the CTL epitope while bound in the MHC-1 groove.

16. (Original) The method of claim 1, further comprising modeling the CTL epitope while bound in the MHC-II groove.

17. (Original) The method of claim 1, further comprising substituting a second amino acid located in the CTL epitope with a second substitute amino acid having an extended or shortened side chain as compared to the second amino acid.

18. (Original) The method of claim 17, further comprising substituting a third amino acid located in the CTL epitope with a third substitute amino acid having an extended or shortened side chain as compared to the third amino acid.

19. (Original) The method of claim 18, further comprising substituting a fourth amino acid located in the CTL epitope with a fourth substitute amino acid having an extended or shortened side chain as compared to the fourth amino acid.

20. (Original) The method of claim 1, wherein the antigen is a tumor antigen.

21. (Original) The method of claim 20, wherein the tumor antigen is derived from breast cancer, ovarian cancer, prostate cancer, blood cancer, skin cancer, uterine cancer, cervical

cancer, liver cancer, colon cancer, lung cancer brain cancer, head & neck cancer, stomach cancer, esophageal cancer, pancreatic cancer, or testicular cancer.

22. (Original) The method of claim 21, wherein the tumor antigen is HER-2.

23. (Original) The method of claim 1, wherein the antigen is a viral antigen.

24. (Original) The method of claim 1, wherein the antigen is a bacterial antigen.

25. (Original) The method of claim 1, wherein the antigen is a parasitic antigen.

26. (Original) The method of claim 1, wherein modulation of immunogenicity comprises an increase in the antigen's ability to selectively activate high-avidity CTL precursors.

27. (Original) The method of claim 1, wherein modulation of immunogenicity comprises an increase in the antigen's ability to activate low-avidity CTLs.

28. (Original) The method of claim 1, wherein modulation of immunogenicity comprises an increase in the antigen's ability to protect CTLs from activation induced cell death.

29. (Original) The method of claim 1, wherein modulation of immunogenicity comprises an increase in the antigen's ability to selectively activate cytokine production.

30. (Original) The method of claim 1, wherein modulation of immunogenicity comprises an increase in the antigen's ability to induce CTL proliferation.

31 (Original) The method of claim 1, wherein the substitution increases the affinity of the antigen for a T cell receptor.

32. (Original) The method of claim 1, wherein the substitution reduces interactions that interference with T cell receptor binding.

33-43. (Canceled)